

# Tailgate/Toolbox Topics



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## Lockout / Blockout

Most accidents with machines happen when they are running — true or false?

The answer is that for industry in general, we really don't know. Statistics are available for a few industries, however. In California's iron and steel foundry industry, 4.2 percent of all accidents happen when machinery is defective, or is operated under excessive stress or excessive speeds.

What is significant is that almost as many accidents happen, 3.1 percent, when workers are cleaning, adjusting and servicing the machinery—when it's not supposed to be moving.

### Kinds of Accidents

What kinds of accidents happen when you don't lock and block the machine you are servicing?

How serious are these accidents likely to be?  
Injuries are of two types: those caused by crushing and those caused by electrocution. Typical injuries are amputation, bone fractures, lacerations, electrical shock.

Failure to lock the machine off while servicing it can result in serious and perhaps fatal injuries, especially if you are working with exposed wiring. Failure to also block moveable or potentially moveable parts of the machine is a major cause of crushing injuries.

### Safety Order [3314](#) on Lockout/Blockout

During machine cleaning, servicing or adjusting operations, the power source must be de-energized or disengaged and the moveable parts of the machine locked or blocked to prevent movement. If you have to be able to move parts of the machine in order to service it, your employer must provide you with extension tools or other means of protection, and thoroughly train you in their safe use.

If the machine you are working with has lockable controls, lock them out or seal them in the off position. If the machine doesn't have lockable controls, de-energize it or disconnect it from the power source.

When you have locked the controls, tag them. Your employer has a supply of accident prevention signs or tags, padlocks and seals.

If you work on a repetitive process machine that requires power to maintain indexing, special requirements have to be met when you are servicing, setting-up or testing the machine. The operating station must be under the control of a qualified worker who is in constant communication with the servicing worker, or who keeps that person in sight at all times. When the operator has to leave the operating station to install tools, machine parts that could move rapidly must be individually locked out. When repair procedures require adjustment or replacement of parts, de-energize the machine and disconnect it from the power source.

### Discussion Questions

- ♦ Do you have any questions about how to lock out or block out the machinery in this shop?
- ♦ Are there times when you aren't sure whether to lock out or block out?
- ♦ When are workers most likely to fail to lock out or block out the machinery?
- ♦ How can the requirements of safety order 3314 be enforced in this shop?